CLAIMS

1. A method for controlling a primary current in an ignition coil of an internal combustion engine with controlled ignition, in which the current is established in an inductive primary circuit over a given duration, referred to as the conduction time and determined by calculation and/or as a function of measurements carried out in the primary circuit,
characterized in that the conduction time is calculated according to the following steps:
- predetermining the predetermined conduction time (td_i),
- carrying out at least one measurement of the current (Ic_i) in the primary circuit at an instant (t_i) lying in the last tenth of the predetermined conduction time (td_i),
- estimating the current (If_i) at the end of the predetermined conduction time (td_i), as a function of the measurement(s) carried out,
- optionally correcting the conduction time (td_i) for the ignition cycle during which the last current measurement was carried out, as a function of the previous estimate and the current ($I_{target\ i}$) desired at the end of the conduction time.

2. The control method as claimed in claim 1, characterized in that the predetermined conduction time (td_i) is obtained on the basis of tables stored in a management and control device (16) of the ignition coil, as a function of parameters such as in particular the potential difference (V) applied to the terminals of the primary circuit.

3. The control method as claimed in one of claims 1 and 2, characterized in that the estimation of the current (If_i) at the end of the predetermined conduction time (td_i) is carried out on the basis of a measurement by linear extrapolation.

4. The control method as claimed in one of claims 1 to 3, characterized in that the estimation of the

current (If_i) at the end of the predetermined conduction time (td_i) is carried out by linear extrapolation of the measurement carried out, by forming an average with measurements taken previously.

5. The control method as claimed in claim 4, characterized in that a moving average of the estimated final current is formed.

6. The control method as claimed in one of claims 1 to 5, characterized in that the correction of the conduction time is carried out linearly as a function of the final current, whether or not it is averaged.

7. The control method as claimed in one of claims 1 to 6, characterized in that the desired final current ($I_{target\ i}$) is determined as a function of the speed (N) of the engine in question.